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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,915	07/09/2001	Simon Tam	110032	4511
25944	7590	11/16/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			LIANG, REGINA	
			ART UNIT	PAPER NUMBER
			2674	

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/899,915	Applicant(s) TAM, SIMON	
	Examiner Regina Liang	Art Unit 2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4,5,7,10-14,27,29-34,36 and 39-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 36 and 38-43 is/are allowed.
- 6) ☒ Claim(s) 4,5,7,10-14,27 and 29-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/20/04 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. Claims 4, 5, 7, 10-14, 27, 29-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Dawson (US. PAT. NO. 6,229,506 hereinafter Dawson)

As to claim 12, Fig. 2 of Dawson discloses a circuit for controlling a current supply to an electroluminescent element (OLED), comprising providing a current path during a programming stage (Load Data phase), the current path connecting to a current sink through a data line (see col. 3, lines 31-53), and providing a current path during a reproduction stage (Continuous Illuminating Phase) the current path passing through OLED (col. 3, lines 54-65).

As to claims 4, 11, 27, 32, Fig. 3 of Dawson discloses a driver circuit to drive a pixel of an electroluminescent element (OLED), the circuit comprising a transistor (P1) connected so as to operatively control a current supplied the OLED, a first switching device (e.g., P4) connected so as to establish a current path which a data current follows during a programming stage, the

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data current flowing through the transistor during a programming stage (the stage for charging the capacitor C_c , see col. 4, line 60 to col. 5, line 21 for example), a second switching device (e.g., P2) connected so as to establish a current path through the transistor and the OLED during a reproduction stage (the stage for driving the OLED), the first switching device being connected such that the current path does not pass through the OLED during the programming stage (P2 is off when charging the C_c), the first and second switching devices being controlled by respective control signals supplied from separate signal lines (P3, P4 are controlled by signal lines 330 and 320, P2 is controlled by signal line 340).

As to claims 5, 7, Fig. 3 of Dawson teaches a third switching device (P3) as claimed.

As to claim 10, Dawson teaches the circuit is implemented with polysilicon TFT (col. 2, lines 57-59).

As to claims 13, 14, 33, Dawson teaches the electroluminescent display device comprising driver circuit and an electronic apparatus incorporating the electroluminescent display device.

As to claim 29, Dawson teaches the transistor is a p-channel TFT.

As to claim 30, col. 4, lines 16-18 of Dawson teaches the switching devices comprising all n-channel TFT.

As to claim 31, Dawson teaches the first current path and the second current path include a transistor (P1 in Fig. 3).

Claim Rejections - 35 USC § 103

4. Claims 12 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bae et al (US. PAT. NO. 6,580,408 hereinafter Bae).

As to claims 12 and 34, Figs. 2-4 of Bae discloses a circuit for controlling a current supply to an EL, comprising providing a current path during a programming stage (the stage for charging the capacitor C_{STO} in which T1 and T4 are turned on, see col. 4, lines 36-41), providing a current path during a reproduction stage (the stage for driving the EL in which T1, T4 are turned off, and T2 is turned on), the current path passing through the EL (col. 4, lines 44-52). Bae does not explicitly disclose the current path during the programming stage connecting to a current sink through a data line. However, Bae teaches a current driving source connected a stage of the data line (col. 6, lines 19-20, and Figs. 2-4 of Bae show that each the data line D having a current source I_o), which is the same as applicant's Fig. 5 where each of data line connecting to a current source I_{DAT} to provide a current sink through a data line). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to realize the circuit of Bae having the current path connecting to a current sink through a data line during the programming stage as claimed in the same manner as applicant.

Allowable Subject Matter

5. Claims 36, 38-43 are allowed.

Response to Arguments

6. Applicant's arguments filed 9/20/04 have been fully considered but they are not persuasive.


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Applicant's remarks regarding Dawson on page 8 are not persuasive. Dawson teaches at the end of Auto Zero phase (stage for charging the capacitor Cc), the select line was set to "Low" to turn on P4, the data line 310 is set to a data voltage, this data voltage is transmitted through capacitor Cc 350 onto the gate of transistor P1 (col. 5, lines 15-19), which reads on a first switching device (P4) connected so as to establish a current path through which a data current flows during a programming stage, the data current flowing through the transistor (P1) during the programming stage as claimed. Furthermore, Fig. 3 of Dawson teaches during the stage for charging the capacitor Cc (programming stage), the illuminate line 340 is set to "High" so that the transistor P2 is turned off (col. 5, lines 1-3), thus, when the transistor P2 is turned off, the current path does not pass through the OLED.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (703) 305-4719. The examiner can normally be reached on Monday-Friday from 9AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


REGINA LIANG
PRIMARY EXAMINER
ART UNIT 2674

RL
11/10/04